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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/663,256

09/16/2003

Yong Ho Son

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09/05/2006

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,256

Applicant(s)

SON ET AL.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. This Office action is in response to applicant's paper filed 7/7/2006. **Claims 4-9** as amended are still in consideration for this application.
2. Examiner acknowledges applicant's affirmation of the restriction.
3. Examiner **withdraws** the claim objection(s). Examiner thanks applicant for making the necessary corrections.
4. Examiner **withdraws** the objection(s) to the specification. Examiner thanks applicant for making the necessary corrections.
5. Examiner does not **withdraw** the 112-first paragraph rejection(s). In particular, applicant failed to address the examiner's comment with respect to figure 6. Please see the original 112 first paragraph rejection below.
6. Examiner does not **withdraw** the anticipated rejection to *Hrastar et al.* The following comments fully address applicant's arguments with respect to the rejection. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the type of data stream such as a high bandwidth or low bandwidth data stream) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Upon very careful review, the examiner notes that all the limitations are taught given a reasonable but broad interpretation of the recited claim subject matter in view of applicant's specification. As such, although a modem pool 135 is shown on a head end side, see e.g., figure 1, the modem

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pool 135 is treated as an intermediate node for the purpose of the rejection. In particular, since the modem pool 135 forwards information at least between the control server 125 and the RF modem 106, the modem pool 135 acts as an *intermediate* device. Thus given the preamble of the claim, a head end may be put in communication with a subscriber device via an intermediate node. No further functionality of an intermediate node is further recited in the claims. With respect to first identification information, the examiner thanks applicant for pointing out the superlink triplet does not teach information used for routing information to the headend. As such, the examiner has further clarified in the rejection below that the IP address of the RF modem 106(i) is at least the first identification information and not the super triplet. As noted, the IP address of the RF modem is sent via the DHCPOFFER packet 715. Specifically, note that the RF modem 106(i) can now use TCP/IP protocols to communicate with the headend devices connected to LAN 120 once the IP address is received, see e.g., column 18, lines 1-7. The examiner would like to further point out that how information is routed to the headend either by the PSTN or CATV network, is not further recited in the claims. The second information is the LinkID sent in DHCP acknowledgment 719. The second information (i.e., the LinkID) allows at least the cable modem to tune to a specific channel in order to receive information from the headend. Thus the information is used for routing communications to the subscriber unit meeting the recited claim limitation. Again, how information is routed to the subscriber unit is not further recited in the claims. Hence the rejection below is maintained.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claim 9** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, claim 4 recites the following limitations at issue: “establishing a session between the head-end and the subscriber service *in response to the head-end receiving the second identification information in the second data-stream* wherein the session is selected *from a User Datagram Protocol-based session and a Transmission Control Protocol-based session*”. In particular, see e.g., figure 5 and column 9, lines 17-40 of U.S. Patent 6,697,376 B1 (applicant’s parent case) which teaches sending the second identification information in e.g., step 510 of the figure. Thus the above step of establishing a session is further taught in steps 512-514. Note that neither of these further steps teaches that the channel is a TCP/UDP channel. No further support is found at column 9, lines 17-40 of the patent. In particular, the only mention of TCP/UDP was found with respect to figures 6 and 7, see e.g., column 9, line 40 to column 10, line 38. Note that the above figures are in response to a VoD service 602 and 702 and not with respect to first identification information/second identification information. In particular, note that End block in figure 5 thus not further teaching an “in response to the head-end receiving second identification information”.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. **Claims 4, 5, 8 and 9** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,295,298 B1 to *Hrastar et al.* (“*Hrastar*”).

As to **claim 4**, see e.g., figure 1 of *Hrastar* where the headend is at least the communications manager 102 and the control and management server 125. The intermediate node is taught e.g., as the modem pool 135 and the subscriber device is taught e.g., as the RF modem 106 and/or host 108. As such, please see figure 7 with respect to a first and second data stream. In particular, first identification information from the headend into a first datastream, the first identification information for routing communication to the headend is taught e.g., as the DHCP response with vendor data 715 and 717. Specifically, for the “first identification information” see e.g., 18, lines 1-45 and in particular the IP address of the RF modem is used for communication to the headend, see e.g., column 18, lines 1-8 (i.e., RF modem 106(i) can now use TCP/IP protocols to communicate with the headend devices connect to LAN 120). In response to receiving the first datastream at the subscriber device, using the first identification information in the first datastream to provide a second datastream for the headend having second identification information, the second identification information for routing communication see e.g., the send ack to communications manager 719. In particular, the second acknowledgment to communications manager 719 contains at least the RF modem 106’s linkID as a second identification information, see e.g., column 18, lines 59-

67. Finally, with respect to establishing a session between the headend and the subscriber device in response to the headend receiving the second identification information in the second datastream, see e.g., the session established in figure 7.

As to **claim 5**, a session manager is either the control server 125 or communications manager 102.

As to **claim 8**, the second acknowledgment to communications manager 719 contains at least the RF modem 106's linkID, see e.g., column 18, lines 59-67.

As to **claim 9**, see e.g., column 6, lines 20-25 which teach at least establishing a TCP/IP session.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,295,298 B1 to *Hrastar et al.* ("*Hrastar*") in view of U.S. Patent No. 5,671,217 A to *Adams et al.* ("*Adams*").

As to **claim 6**, it may not be clear from figure 1 of *Hrastar* that at least the modem pool 135 is associated with a logical node.

Adams teaches that an intermediate node such as physical node 108 in 3 can be associated with a logical node 302.

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For the purpose of making the rejection, the examiner proposes to modify *Hrastar* by clarifying that a modem pool 135 is a physical node 108 as taught by *Adams* which is associated with a logical node 302.

Hence the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to make the above-proposed modification. In particular, one skilled in the art would have been motivated to make the above modification for providing a scalable communications network. As such, *Adams* teaches the above motivation at e.g., column 2, lines 41-50.

Allowable Subject Matter

13. **Claim 7** would be allowable if rewritten to overcome the claim objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

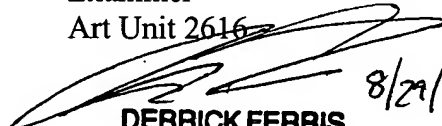
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


DWF

Derrick W. Ferris
Examiner
Art Unit 2616


8/21/06
DERRICK FERRIS
PATENT EXAMINER